

## CLAIMS

### Claims 1-20 (new)

Claim 21 (new): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;  
a reinforcement member located within the cavity of the structure, the reinforcement member including:

- i. a carrier member formed as a shell and having an inner surface and an outer surface; and
- ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein the at least one locating member is attached to the carrier member with a mechanical fastener or an adhesive.

Claim 22 (new): A structural system as in claim 21 wherein a sealant material is disposed upon the at least one locating member

Claim 23 (new): A structural system as in claim 21 wherein the at least one locating member includes a panel that overlays a surface of the reinforcement member.

Claim 24 (new): A structural system as in claim 21 wherein the at least one locating member includes a spring mechanism.

Claim 25 (new): A structural system as in claim 21 wherein the at least one locating member is integrally formed with the carrier member.

Claim 26 (new): A structural system as in claim 21 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 27 (new): A structural system as in claim 21 wherein the at least one locating member includes at least three locating members.

Claim 28 (new): A structural system as in claim 21 wherein at least 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 29 (new): A structural system as in claim 21 wherein the outer surface of the carrier member includes a concave side surface and a convex side surface.

Claim 30 (new): A structural system as in claim 21 wherein the at least one locating member functions as a baffle and physically substantially separates portions of the cavity from each other.

Claim 31 (new): A structural system as in claim 21 wherein the reinforcement material is configured to foam upon exposure to heat in an e-coat or paint oven.

Claim 32 (new): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;

a reinforcement member located within the cavity of the structure, the reinforcement member including:

- i. a carrier member formed as a shell and having an inner surface and an outer surface; and
- ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein the at least one locating member includes a panel that overlays a surface of the reinforcement member.

Claim 33 (new): A structural system as in claim 32 wherein the structure is a pillar of the automotive vehicle and wherein the at least one locating member includes a first locating member and a second locating member and the second locating member includes a spring mechanism and the second locating member flexes while the first locating member contacts walls of the structure for locating the reinforcement member in the cavity.

Claim 34 (new): A structural system as in claim 32 wherein a sealant material is disposed upon the at least one locating member.

Claim 35 (new): A structural system as in claim 32 wherein the at least one locating member is integrally formed with the carrier member.

Claim 36 (new): A structural system as in claim 32 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 37 (new): A structural system as in claim 32 wherein at least 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 38 (new): A structural system as in claim 32 wherein the at least one locating member functions as a baffle and physically substantially separates portions of the cavity from each other.

Claim 39 (new): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;  
a reinforcement member located within the cavity of the structure, the reinforcement member including:

- i. a carrier member formed as a shell and having an inner surface and an outer surface; and
- ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein a sealant material is disposed upon the at least one locating member.

Claim 40 (new): A reinforced structural system as in claim 39 wherein the at least one locating member is integrally formed with the carrier member.

Claim 41 (new): A structural system as in claim 39 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 42 (new): A structural system as in claim 39 wherein the sealant material is configured to foam upon exposure to heat in an e-coat or paint oven.

Claim 43 (new): A reinforced structural system as in claim 39 wherein at least about 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 44 (new): A reinforced structural system as in claim 39 wherein the at least one locating member is at least partially formed of a microcellular plastic material.

Claim 45 (new): A reinforced structural system as in claim 39 wherein the at least one locating member functions as a baffle and physically substantially separates portions of the cavity from each other.